

CLAIMS

1. A flow through cell for use in a spectrophotometer for analysis of dissolved chemical substances in a flowing liquid stream, comprising
 - 5 a plurality of body members including an intermediate body member located between two other body members, the plurality of body members being clamped together and providing a small volume flow through passage, wherein a part of the flow through passage comprises a hole through the intermediate body member together with a liquid inlet region at one end of the
 - 10 hole and a liquid outlet region at the other end of the hole, wherein the two other body members are each associated with an optically transparent window aligned with a respective end of the hole through the intermediate body member thereby providing an optical pathway through said part of the flow through passage,
 - 15 wherein the liquid inlet and liquid outlet regions are provided by respectively, a portion of the flow through passage through which liquid flows into or out of a said region substantially immediately adjacent the optically transparent window transversely of the direction of the hole.
- 20 2. A flow through cell as claimed in claim 1 including a resilient sealing gasket located between facing surfaces of the intermediate body member and, respectively, each of the two other body members, wherein each gasket includes a gallery which provides said portion of the flow through passage.
- 25 3. A flow through cell as claimed in claim 2 wherein the gallery in the gasket on an inlet side of the flow through passage is in the form generally of a spiral.
4. A flow through cell as claimed in claim 1 wherein each of said other two body members includes a gallery which provides said portion of the flow
- 30 through passage.
5. A flow through cell as claimed in claim 4 wherein at least the intermediate body member, or at least each of the other two body members is resilient to provide for sealing contact between adjacent body members.

6. A flow through cell as claimed in any one of claims 1 to 5 wherein the optically transparent window associated with each of the other two body members is a window assembly sealingly mounted within a hole in a body member.
7. A flow through cell as claimed in any one of claims 1 to 5 wherein the optically transparent window associated with each of the other two body members is provided by respectively a transparent plate sandwiched between the intermediate body member and one of the other body members.
8. A flow through cell as claimed in any one of claims 1 to 7 wherein the body members are of rectangular parallelepiped shape.
9. A flow through cell as claimed in any one of claims 1 to 8 wherein the body members are clamped together by screw fasteners.
10. A flow through cell as claimed in claim 9 wherein the screw fasteners pass through holes in one of the other body members and the intermediate body member and engage in threaded holes in the other body member.
11. A flow through cell as claimed in any one of claims 1 to 10 wherein the flow through passage includes another part located between further optically transparent windows associated with the two other body members thereby defining a second optical pathway.
12. A flow through cell as claimed in claim 11 wherein the second optical pathway is shorter than the first defined optical pathway.
13. A flow through cell as claimed in any one of claims 1 to 10 wherein the body members also provide an optical pathway separated from the flow through passage for a reference beam to be passed through the cell.